

REMARKS

Claims 1-14 remain in the application. The applicant has added claims 16 through 24.

The office action objects to claim 1 as being indefinite for failing to particularly point out an distinctly claim the subject matter that the applicant regards as his invention. Specifically, the office action indicates that there's an inconsistency between the language in the preamble and certain portions in the body of the claim and that it's unclear whether the applicant intends the preambular recitation of "a seat or body support system having more than one expandable chambers, a pressure/exhaust system, a controller . . ." to be "part of" the method claim. In response, and as the office action suggests, the applicant has amended claim 1 to positively recite the steps of "providing a seat or body support system . . ." and providing a controller . . ." The applicant maintains that claim 1, as amended, is in acceptable form.

The office action objects to claim 2 because the limitation "the pressure source" lacks antecedent basis. The applicant has amended claim 2 to replace the term "the pressure source" with a term ("the source of pressurized fluid") having antecedent basis.

The office action objects to claims 13 and 14 because it's unclear whether limitations enclosed within parenthesis are parts of the claim. The applicant has amended claims 13 and 14 by removing the parenthetical phrases.

As defined in the amended Claim 1, the subject invention comprises a massage method that includes providing a seat or body support system including more than one expandable chamber and including a pressure system and an exhaust system for each expandable chamber. A controller is provided for operating the pressure and exhaust systems according to multiple selectable pre-determined massage control index sequences. A massage sequence is selected by selecting one of the massage control index sequences. Each massage control index sequence causes the controller to alternately provide fluid communication between selected ones of the expandable chambers and the pressure system to produce an inflow of a fluid to each of the expandable chambers, and

produce an outflow of fluid from each of the previously inflated expandable chambers by operating the exhaust system. Massage intensity is then selected by allowing fluid pressure within the selected chambers to increase only until a selected variable target pressure is reached.

The office action rejects claim 1 under 35 U.S.C. § 102(b) as being anticipated by Yamanaka et al. According to the office action, Yamanaka et al disclose the invention recited in claim 1.

In response, the applicant maintains that claim 1, as amended, includes limitations that Yamanaka et al neither show nor suggest. Specifically, Yamanaka et al. do not disclose or suggest any of the following method steps recited in amended claim 1:

- Providing a controller that operates pressure and exhaust systems according to multiple selectable pre-determined massage control index sequences;
- Selecting a massage sequence by selecting one of the massage control index sequences; and
- Selecting massage intensity by allowing fluid pressure within the selected chambers to increase only until a selected variable target pressure is reached.

As such, Yamanaka et al. do not anticipate claim 1.

The office action rejects claims 1, 5, and 9 under 35 U.S.C. § 102(b) as being anticipated by Fujimoto et al. According to the office action, Fujimoto et al disclose the invention recited in each of these three claims.

In response, the applicant maintains that claim 1, as amended, includes limitations that Fujimoto et al neither show nor suggest.

First, Fujimoto et al don't disclose the step of providing a controller that operates pressure and exhaust systems according to multiple selectable pre-determined massage control index sequences. Instead, Fujimoto et al disclose only switches 23a-e that must be manually and separately thrown to select such respective single parameters as location, speed and duration of massage, and a switch 27 that only enables an air massage treatment (as opposed to an "electric potential" treatment) when manually thrown). The

control circuit 100 of the Fujimoto et al “controller” 101 is only disclosed as controlling the stepper motor 65 for the rotary valve 60 and the electric plate in response to the above-described switch actuations.

Also, Fujimoto et al don’t disclose the step of selecting a massage sequence by selecting one of a multitude of massage control index sequences. Fujimoto et al do not disclose course B as having a different order of inflation from course A, only a larger number of selected air bags (18a-18h rather than just 18a-18e). Fujimoto et al also don’t disclose selection of the sequence by selecting one of a multitude of massage control index sequences as claimed.

Neither do Fujimoto et al. disclose the step of selecting massage intensity by allowing fluid pressure within the selected chambers to increase only until a selected variable target pressure is reached.

For these reasons the applicant maintains that Fujimoto et al do not anticipate claim 1.

Regarding claim 5, Fujimoto et al don’t disclose:

- providing a range of desired massage index sequences in accordance with user selected preferences (Fujimoto et al only disclose a switch 24a that increases the number of air bags operated – without changing sequence of inflation); or
- operating a switch to select one of the desired massage index sequences from the range of sequences (each Fujimoto et al switch is an “ON-OFF” switch that operates one parameter only and doesn’t alter inflation sequence).

Regarding claim 9, Fujimoto et al don’t disclose inflation and deflation of zones in a series fashion. Instead, Fujimoto et al disclose inflation and deflation of air bags within a zone.

For these reasons, and because claims 5 and 9 depend from an allowable base claim, the applicant maintains that Fujimoto et al do not anticipate claims 5 or 9.

The office action rejects claims 1-3 and 5-8 under 35 U.S.C. § 102(b) as being anticipated by Kashiwamura et al. According to the office action, Kashiwamura et al disclose the invention recited in these claims.

In response, the applicant maintains that claim 1, as amended, includes limitations that Kashiwamura et al neither show nor suggest.

Kashiwamura et al do not disclose or suggest providing a controller that operates pressure and exhaust systems according to multiple selectable pre-determined massage control index sequences. While Kashiwamura et al do suggest in column 3, lines 17-24 that the controller be used to provide a massage by oscillating changes in the air pressures of the air bags, they don't suggest that the controller operate according to multiple selectable pre-determined massage control index sequences;

Kashiwamura et al also do not disclose or suggest selecting a massage sequence by selecting one of the massage control index sequences as claimed. "Index N" identified in the office action as a "massage control index" is actually an index for a subroutine for sequentially measuring and storing pressure values of all the air bags after air pressure values of the air bags have been manually adjusted to desired values. (Col. 6, lines 3-35 and Fig. 7).

Neither do Kashiwamura et al disclose or suggest selecting massage intensity by allowing fluid pressure within the selected chambers to increase only until a selected variable target pressure is reached.

As such, Kashiwamura et al. do not anticipate claim 1.

Regarding claim 2, Kashiwamura et al don't disclose or suggest the step of providing each exhaust system with an exhaust valve connected to the controller for controlling the fluid flow from a previously inflated expandable chamber. Neither do Kashiwamura et al disclose or suggest operating the supply and exhaust valves to produce individual chamber to chamber inflation followed by chamber to chamber deflation. Instead, Kashiwamura et al disclose a common exhaust.

Regarding claim 3, Kashiwamura et al don't disclose or suggest opening the common exhaust in accordance with a massage index sequence.

Regarding claim 5, Kashiwamura et al don't disclose or suggest providing a range of desired massage index sequences in accordance with user selected preferences or operating a switch to select one of the desired massage index sequences. In contrast, claim 6 only discloses selective control of air pressure to support a person against the acceleration of a vehicle. This neither describes nor suggests a massage sequence or a massage index sequence.

Regarding claim 8, Kashiwamura et al don't disclose or suggest providing a microcontroller programmed in response to a signal from a pressure sensor to initially inflate the expandable chambers to a gross pressure level with all of the valves initially opening before cyclically connecting each of the expandable chambers to the pressure source in accordance with a selected massage index sequence.

For these reasons, and because claims 2, 3, and 5-8 depend from an allowable base claim, the applicant maintains that Fujimoto et al do not anticipate these claims.

The office action rejects claims 1 and 5-8 under 35 U.S.C. § 102(b) as being anticipated by Gillen, Jr. et al. According to the office action, Gillen, Jr. et al disclose the invention recited in claim 1.

In response, the applicant maintains that claim 1, as amended, includes limitations that Gillen, Jr. et al neither show nor suggest.

Gillen, Jr. et al neither disclose nor suggest providing a controller that operates pressure and exhaust systems according to multiple selectable predetermined massage control index sequences. Instead, the controller directs a single sequence that progresses from one adjacent chamber to another then repeats until the operating time or a predetermined number of cycles is completed. (Col. 9, lines 49-53). The only variables that the Gillen, Jr. et al controller commands is in wave speed, width, and amplitude (pressure). (col. 9, lines 36-47).

For this reason, it's also apparent that Gillen, Jr. et al neither disclose nor suggest selecting a massage sequence or selecting such a sequence by selecting one of a

multiplicity of massage control index sequences as claimed. The "menu of options" discussed in column 9, lines 1-27 only allows a user to select wave speed, width, and amplitude (pressure).

Neither do Gillen, Jr. et al. disclose or suggest selecting massage intensity by allowing fluid pressure within the selected chambers to increase only until a selected variable target pressure is reached. Instead, Gillen, Jr. et al disclose a knob 14A that allows a user to set overall operating pressure to be fed to all the chambers.

As such, Gillen et al. do not anticipate claim 1.

Regarding claim 5, Gillen, Jr. et al. neither disclose nor suggest providing a range of desired massage index sequences in accordance with user selected preferences or operating a switch to select one of the desired massage index sequences.

Regarding claim 8, Gillen, Jr. et al. neither disclose nor suggest providing a microcontroller that's programmed to initially inflate expandable chambers to a gross pressure level with all of the valves initially opening before cyclically connecting each of the expandable chambers to a pressure source in accordance with a selected massage index sequence.

For these reasons, and because claims 5-8 depend from an allowable base claim, the applicant maintains that Fujimoto et al do not anticipate claims 5-8.

The office action rejects claim 4 under 35 U.S.C. § 103(a) as being unpatentable over Kashiwamura in view of Takeuchi. According to the office action, Kashiwamura discloses the claimed invention except for an exhaust pump that it would have been obvious to add, as Takeuchi ostensibly suggests, "to forcibly and quickly discharge the air out of the air bags when needed." (col. 5, lines 31-38). The applicant maintains that claim 4 is allowable because it depends from an allowable base claim.

The office action rejects claims 10, 11, and 13 under 35 U.S.C. § 103(a) as being unpatentable over Gillen. According to the office action, Gillen teaches sequential

inflation and staggered sequential inflation (col. 9, lines 11-17) that produces overlapping sequencing inflation and deflation (col. 11, lines 15-58). In light of this, the office action reasons that it would have been obvious to include "various alternatives sequential inflation and deflation in operation of the device as claimed, for the purpose of providing desirable manner in which the user's back can be massaged in a particular sequence that would suit the user's need."

In response, the applicant maintains that these claims are patentable over the Gillen and asks that the examiner explain the reasoning behind this obviousness determination, keeping in mind that the Federal Circuit has ruled that an obviousness determination relying on general knowledge requires that such knowledge be articulated in the record as "reasoned findings"; that the question of motivation can't be resolved on subjective belief and unknown authority; that it's not enough to make the requisite findings - there must also be an explanation of how the findings support the conclusion of motivation; that conclusions about what's "basic knowledge" or "common sense" can't remedy deficiencies in the cited references; that common knowledge and common sense may be applied to an analysis of the evidence, but can't substitute for evidence; and that when relying on general knowledge to negate patentability, that knowledge must be articulated and placed on the record. *In re Lee*, 61 USPQ2d 1430 (Fed. Cir. 2002).

The office action rejects claims 12 and 14 under 35 U.S.C. § 103(a) as being unpatentable over Kashiwamura in view of Gillen. According to the office action, Kashiwamura discloses the claimed invention except for the various inflation and deflation sequences. According to the office action, Gillen teaches sequential inflation and staggered sequential inflation (col. 9, lines 11-17) that produces overlapping sequencing inflation and deflation (col. 11, lines 15-58). In light of this, the office action reasons that it would have been obvious to include "various alternatives sequential inflation and deflation in operation of the device as claimed, for the purpose of providing desirable manner in which the user's back can be massaged in a particular sequence that would suit the user's need." The office action also mentions "inherent structural features that have been demonstrated in the art" and that it's well within the knowledge of a

skilled artisan to use the prior art device to provide various alternative inflation and deflation sequences as claimed.

In response, the applicant maintains that claims 12 and 14 are patentable over these references and, on the same basis as set forth above with regard to claims 10, 11, and 13, asks that the examiner provide a more complete reasoned analysis supporting this obviousness determination.

The applicant has added claims 16-24 to more clearly set forth the scope of the invention. What distinguishes claims 15-19 from the prior art is that they depend from allowable base claims and include limitations that, in combination, are not shown or suggested by the prior art of record. What distinguishes claim 20 is that includes limitations that, in combination, are not shown or suggested by the prior art of record. What distinguishes claims 21-24 is that they depend from an allowable base claim and include further limitations that, in combination, are not shown or suggested by the prior art.

The applicant has amended the Abstract and the Summary of Invention to more accurately describe the invention recited in the broadest claims.

The applicant has amended the Specification to correct certain grammatical errors, to clarify the description, and to add a broader description for the preferred embodiments tracking the new and amended claims. The applicant maintains that all material added to the description is fully supported in the drawings and the original specification itself.

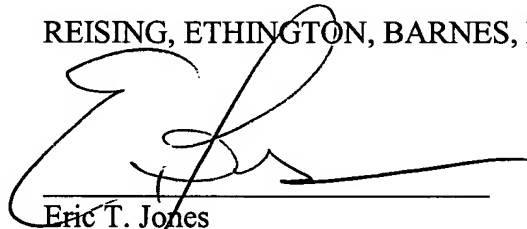
Claims 1-24 recite patentable subject matter and are allowable. Therefore, the applicant respectfully submits that the application is now in condition for allowance and respectfully solicits such allowance. Please favorably reconsider the outstanding office action.

February 19, 2004

I authorize the Assistant Commissioner to charge any deficiencies, or credit any overpayment associated with this communication to Deposit Account No. 50-0852. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

REISING, ETHINGTON, BARNES, KISSELLE, P.C.

A handwritten signature in black ink, appearing to read "Eric T. Jones", is written over a horizontal line.

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